

IN THE ABSTRACT:

~~For the purpose of~~ An apparatus for removing wraparound artifacts without degrading image quality of an image, ~~there are provided~~ includes a phase correcting section 1072 for conducting phase correction processing on received signals in an actual scan based on a reference signal as a corrective signal received by one of a plurality of receive coils 1013, for example, by a receive coil 10131, without applying a gradient magnetic field G_p in a phase encoding direction, and an unfolding section 1075 for removing wraparound artifacts in an image based on the signals received by the plurality of receive coils 1013 in the actual scan and subjected to the phase correction processing by the phase correcting section 1072, and on the difference in sensitivity distribution among the plurality of receive coils 1013, so that the phase correction processing is conducted while preserving the relative phase relationship among the coils, and unfolding processing (removal processing) is conducted using the result of such phase correction processing.